

Abstract

The present invention relates to a pumping voltage generator configured to effectively generate a pumping voltage VPP depending on voltage variation. The pumping voltage generator of the present invention comprises a detector, a cycle selecting unit, an oscillator, a control driver and a pumping unit. The detector detects a plurality of pumping voltage levels, and outputs a plurality of enable signals in response to the detected voltage levels. The cycle selecting unit outputs an oscillation cycle selecting signal for controlling an oscillation cycle of a pumping voltage in response to the plurality of enable signals. The oscillator enabled by one of the plurality of enable signals outputs an oscillation signal corresponding to the oscillation cycle selecting signal. The control driver outputs a pumping control signal for controlling the pumping operation in response to the oscillation signal. The pumping unit outputs the pumping voltage in response to the pumping control signal.